

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

TWO NEW MANZANITAS FROM THE SIERRA NEVADA
OF CALIFORNIA.

BY C. HART MERRIAM.

The manzanitas of the Ponderosa Pine belt of the west flank of the Sierra Nevada, notwithstanding their abundance and conspicuousness, have been surprisingly slow in claiming the attention of botanists, and two of the most widespread species—*viscida* and *manzanita*, both of which occur also in the inner coast ranges north of San Francisco Bay—remained unnamed until 1887, when they were described by Parry; while *patula* of Greene escaped until 1891, and *mariposa* of Dudley until 1892. Even at this late day two additional strongly marked species from the same region appear to have eluded the keen eyes of botanists. One of these, the one here named *mewukka* after the Mewuk Indians of the region, has a wide range from Mariposa County to Nevada County and has been known to me for many years; the other, named *nissenana* after the Nissenan Indians (one of the southern divisions of the Midu stock), seems to be rare. I discovered it in August, 1907, on a low ridge southwest of American Flat, about midway between Placerville and Georgetown, in Eldorado County. It appears to belong to the *canescens* group, but differs rather strikingly in the character of bark, which, instead of being smooth and polished, is *fibrous*.

The two new species may be known from the following descriptions:

Arctostaphylos mewukka sp. nov.

(Plates II and III)

A strong erect shrub $1\frac{1}{2}$ -2 meters high, with slender smoothly polished dark purple branches, longish, pointed leaves of dull grayish green, long

slender bract tassels, and large smooth blackish berries externally resembling those of *putula* and containing a solid or little-divided stone imbedded in thick pulp. *Leaves* 40–50 mm. in length, pale dull grayish green, similar on both sides, lanceolate to elliptical, acute pointed (rarely bluntly rounded), often mucronate; glabrous; ribbed and finely reticulate; midrib usually purplish and conspicuous basally (often throughout), petioles 6–8 mm. *Bract tassels* long (40–50 mm. when fully grown), minutely scurfy-puberulent; bracts narrowly foliaceous, deciduous, the lower about 8 mm., the others smaller, sometimes evenly graduated, decreasing upward; mature bract scales small, carinate, recurved, usually becoming awn-pointed. *Pedicels* with a slender elongate bract at base, 12–15 mm. long. *Drupe* globular, large, smooth, dark mahogany brown (appearing black at a little distance), umbilicate at point of attachment, and with a marked pit at opposite pole; pericarp thick; nutlets either a single stone or one large and two or three small segments, indistinctly ribbed or rugose. Flowers unknown.

Type No. 871392 U. S. Nat. Herbarium. Collected 3 miles above Colfax on ridge between North Fork American River and Bear River, November 5, 1911, by C. Hart Merriam.

Distribution and Associates.—*Arctostaphylos mewukka* is a characteristic species of the lower part of the open Ponderosa pine forest belt (Transition zone) on the west flank of the Sierra, where it ranges from Yuba River south at least to the canyon of the Merced, and probably beyond these limits in both directions. In the northern part of its range it is associated with *A. manzanita* and *A. viscida*; in the southern part with *A. mariposa*. Among its other associates are mahala mats (*Ceanothus prostratus*), kit-kit-diz'-za (*Chamaebatia foliolosa*), soft-leaf buckthorn (*Rhamnus tomentella*), and poison oak (*Rhus diversiloba*). Its zone position therefore is below that of its congener, the mountain green manzanita (*A. putula*) and its associate the snow bush (*Ceanothus cordifolius*).

Specimens in the National Herbarium were collected by me in Tuolumne County at Priest Hill in 1906, in 'The Basin' on North Fork Tuolumne River, and at Bald Rock, five miles north of Tuolumne, in 1907; in Mariposa County on the mountains bordering Merced Canyon above El Portal in 1910; and in Placer County on the ridge between North Fork American River and Bear River in 1911. On the latter slope it ranges from three miles above Colfax up to Towle and Gorge stations—perhaps even higher.

The Mú-wa Indians of Yosemite call this species *Muk'-ko*; *A. mariposa* they call *A'-yeh*.

***Arctostaphylos nissenana* sp. nov.**

(Plates IV and V)

An erect shrub about $1\frac{1}{2}$ meters high with reddish brown *fibrous* bark, conspicuously different from the smoothly polished bark of most of the manzanitas. *Leaves* greenish, rather small (20–25 mm. long), elliptic to



Arctostaphylos mewukka Merriam.

From near Colfax, Placer Co., Calif., Nov. 5, 1911. Type specimen No. 871392
U. S. National Herbarium. Not quite $\frac{1}{2}$ natural size.